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ABSTRACT

To expedite acquisition of English language skills needed for full mainstreaming, the Bilingual Basic Skills Program at South Bronx High School in New York City provided instruction in English as a second language and native language arts, and bilingual mathematics, science, and social studies for 370 Spanish speaking students of limited English proficiency, during 1981-82. Aside from instructional services, program activities included curriculum development, support and counseling services, staff development, and provision of opportunities for parent involvement in the program. The report describes the project context, participants, organization, implementation, and evaluation. Evaluation results indicate that (1) gains in English reading were statistically significant; (2) students achieved more English syntax objectives than the criterion objective; (3) a greater proportion of participants passed teacher-made Spanish language arts tests in the spring than in the fall; (4) passing rates were slightly higher than 50 percent for mathematics, about 60 percent for science, and 67 percent (fall) and 58.8 percent (spring) for social studies; and (5) the attendance rate among participants was higher than the school-wide attendance rate. Recommendations for program improvement are presented. (MJL)

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O.E.E. Evaluation Report

February, 1983

Grant Number: G00-780-4260

SOUTH BRONX HIGH SCHOOL

BILINGUAL BASIC SKILLS PROGRAM

1981-1982

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Joan DeMarco (acting)

Project Director:
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UD 022 876

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A SUMMARY OF THE EVALUATION
FOR THE BILINGUAL BASIC
SKILLS PROGRAM
SOUTH BRONX HIGH SCHOOL
1981 - 1982

This program, in its fourth and final year of funding, provided instruction in E.S.L. and native-language skills, as well as bilingual instruction in mathematics, science, and social studies to approximately 370 students of limited English proficiency (LEP) in grades nine through twelve. All program students were Hispanic and spoke Spanish at home. Sixty-nine percent were foreign-born, over 70 percent of these in Puerto Rico. The students varied in English-language proficiency, ability in their native language, and overall academic preparedness.

One of the major goals of the program was to expedite the acquistion of those English-language skills necessary for full mainstreaming. The total program was designed to fulfill city and state requirements for graduation. Mainstreaming was done gradually on an individual basis and began with classes that carried a light reading load. Each program student was carefully monitored and evaluated; flexible programming allowed students to return to the program if they were not sufficiently prepared to handle the work in mainstream classes.

Title VII funds supported administrative and support services staff, with the exception of the assistant principal position which was funded by tax levy. Instructional services and paraprofessional assistance were provided by a combination of tax levy, Module 5, P.S.E.N., and Title I funds. Curriculum development focused on the compilation of existing materials that would be useful to program students. In addition, materials were created in the areas of world history, world culture, health science, mathematics, and Spanish language arts. Supportive services to program students were handled primarily by the grade advisor and consisted of individual and group guidance, career and vocational counseling, referrals to outside agencies, and occasional home visits. Development activities for staff members included monthly department meetings, E.S.L. training, and attendance at conferences and university courses. Parents of program students were actively concerned about their children's progress, although many were hesitant to attend meetings. However, a core group of parents was active in the Parent-Community Advisory Committee and program and school-wide activities.

Students were assessed in English-language development (Criterion Referenced English Syntax Test and the New York City Reading Test); growth in their mastery of Spanish (teacher-made tests); mathematics (the New York City Mathematics Test and teacher-made tests); science and social studies (teacher-made tests); and attendance (school and program records). Quantitative analysis of student achievement indicated that :

--In general, program students met the criterion level of one objective mastered for each month of E.S.L. instruction.

--The gains made by program students on the New York City Reading Test were statistically significant and of moderate educational significance.

--The overall passing rate of program students in native language arts classes was 94 percent in the fall and 64 percent in the spring.

--The gains made by program students on the New York City Mathematics Test were statistically significant and of moderate educational significance.

--In mathematics, the overall pasing rate of program students was 53 percent in the fall and 60 percent in the spring.

--The overall passing rate of program students in science classes was 61 percent in the fall and 59 percent in the spring.

--Social studies achievement was higher in the fall (67 percent) than in the spring (59 percent passing).

--The attendance of program students (87 percent) was 15 percentage points higher than the school-wide attendance.

The following recommendations were aimed at improving the overall effectiveness of the program:

--Developing a systematic way (such as a career guidance survival skills program) for students to interact meaningfully with outside resources.

--Reviewing the appropriateness of curriculum, instruction, and teacher-made instruments used in content area courses in relation to students' linguistic and academic characteristics.

--Stating future program evaluation objectives in measurable terms which reflect the scope of program activities.

--Selecting evaluation instruments relevant to the program's objectives and curricula.

--Making every effort to optimize the conditions of testing and to report data accurately, so that the program's achievements may be documented.

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Oct. 9

SOUTH BRONX HIGH SCHOOL

BILINGUAL BASIC SKILLS PROGRAM

Location:	701 St. Ann's Avenue Bronx, New York 10455
Year of Operation:	1981-1982, Fourth and final year of funding
Target Language:	Spanish
Number of Participants:	371
Project Director:	Christine J. Kicinski
Principal:	Joan DeMarco (acting)

I. PROGRAM OVERVIEW

Most of the Spanish-speaking students who attend South Bronx High School come from the school's immediate vicinity, a major port of entry for Hispanics, which is characterized by poor housing, high crime, and poverty. In 1977, South Bronx High School was designated an academic bilingual school. While its initial enrollment was 310, it now serves almost 1,000 students. Begun in 1978, the Title VII program provides the supportive staff needed to help develop curriculum, assemble materials, clarify teaching goals, train teachers, and provide guidance for students.

Both the school and the program have experienced unusual turnover rates in administrative personnel. The program has had three different directors in as many years; the process to select a fifth principal was underway during the fall, 1982 term. However, the bilingual program was sufficiently stable to allow the achievement of its proposed objectives.

Limited English proficiency (LEP) students who scored below the twenty-first percentile on the Language Assessment Battery (LAB) test are placed in

the bilingual program and programmed into developmental sequences of English as a second language (E.S.L.) and Spanish language arts. The math, science, and social studies departments provide their basic courses in Spanish. Students take the rest of their high school requirements in mainstream courses. Mainstreaming is done gradually on an individual basis. By the time students are ready for mainstream classes, they have developed enough English-language skills to function satisfactorily in them.

A core of parents participate in program activities on an ongoing basis. Parents participate in significant numbers of school events, especially cultural ones. In addition, they maintain ongoing contact with the school, particularly with the program guidance counselor.

II. DEMOGRAPHIC CONTEXT

South Bronx High School is one of three high schools serving the South Bronx: the others are Samuel Gompers, which offers a bilingual vocational program, and Alfred E. Smith. The South Bronx building itself was saved from demolition by its appointment as the special academic bilingual high school for the area. Of its current student body of 992, 676 (68 percent) are Spanish-speaking, including 371 participants in the Bilingual Basic Skills Program.

Although the Bronx has experienced a sharp upward trend in Hispanic population since the program began, the first bilingual school in the City was started almost a decade earlier by the local school district (Community School District 7). A few years later the first bilingual junior high school came into operation and a Puerto Rican district superintendent was appointed to the district. The South Bronx Bilingual High School completed the link which includes the bilingual Hostos Community College, which is also in the area. Thus a student can go from kindergarten through a two-year college program in a completely bilingual setting.

In fact, it is possible for Spanish speakers to conduct their daily affairs without need of the English language. Stores, banks, government offices, and service agencies have Spanish-speaking personnel. Puerto Ricans are among the area's representatives to the City Council, State Legislature, and Congress. Spanish newspapers, radio and television stations, theater, and movie houses are available to area residents. Indeed, for many English speakers who grew up in the South Bronx, Spanish is a second language.

Even though vacant lots, deserted tenements, boarded-up storefronts, and

the ravages of arson are still evident in the vicinity of the high school, there are visible signs of renewal. During the last four years, a large city housing project was constructed next to the school and a new post office opened on the block. The local community board approved plans (that are already under way) for capital construction, sewer improvements, and clearing empty lots. The business hub at 149th Street and Third Avenue is experiencing a surge of economic activity with new stores opening up, providing job contacts for the students. Additionally, the Board of Education has approved construction of an athletic field in back of the high school.

III. STUDENT CHARACTERISTICS

The 1981-1982 enrollment at South Bronx High School includes 676 Hispanic and 318 black students. Of the Hispanics, approximately 62 percent were born in Puerto Rico, 26 percent in the Dominican Republic, 10 percent in other Latin American countries, and ? percent on the United States mainland. Table 1 lists program students according to country of origin for whom this information had been reported.

The South Bronx is a port of entry for many families, a fact that results in high student mobility. Some students travel back and forth between the South Bronx and their country of origin before becoming completely settled on the United States mainland. The more settled families tend to move out of the South Bronx into "better" neighborhoods. Student mobility had also been influenced by family instability and the unavailability of quality housing in the area. Additionally, a high number of project students were affected by a rash of fires in 1980. One student was burned out of his home three times in the same year.

The ratio of female to male students in the program is the same as in the school as a whole. Two-thirds of the total school enrollment are female. Table 2 breaks down the number and percentages of students by sex and grade.

TABLE 1

Number and Percentages of Program Students by Country of Birth

Country of Birth	Number	Percent
Puerto Rico	150	49
Dominican Republic	30	10
Cuba	1	less than 1
Mexico	2	less than 1
Honduras	6	2
Guatemala	2	less than 1
El Salvador	7	2
Colombia	5	2
Ecuador	8	3
United States	96	31
Total	307	100

- Almost half of the students were born in Puerto Rico.
- All students are Hispanic and their home language is Spanish.
- Thirty-one percent of the students are United States-born.

TABLE 2

Number and Percentages of Students by Sex and Grade

Grade	Male N	Percent of Grade	Female N	Percent of Grade	Total N	Column Total: Percent of all Students
9	46	33	93	67	139	41
10	32	28	82	72	114	33
11	27	43	36	57	63	18
12	4	15	23	85	27	8
Total	109	32	234	68	343	100

. Sixty-eight percent of the students are female in the program as a whole. Female students comprise a majority in each grade.

. Most program students are in grade 9.

All program students use Spanish as the home language. Proficiency in English varies greatly according to the total time spent on the mainland and the environmental demands for using the language. The great extent to which the neighborhood accommodates the use of Spanish increases the need for a well-structured developmental E.S.L. component within the bilingual program.

Some students in the bilingual program have experienced interrupted schooling and are overage for their grade. In the fourth year of the program, 26 percent of the students were overage. Table 3 lists the number of students by age and grade.

TABLE 3

Number of Students by Age and Grade

Age	Grade 9	Grade 10	Grade 11	Grade 12	Total
14	34	6	0	0	40
15	54	44	0	0	98
16	33	41	28	1	103
17	15	16	22	16	69
18	2	3	9	7	21
19	0	1	2	3	6
20	0	1	2	0	3
Total	138	112	63	27	340

Overage Students:

Number	50	21	13	3	87
Percent	36	19	21	11	25

Note. Shaded boxes indicate expected age range.

- Twenty-six percent of the students are overage for their grade. Most overage students are in grade 9.
- Most program students are 16 years of age, followed by students who are 15 years of age.
- Program enrollment decreases as grade increases.

IV. PROGRAM DESCRIPTION

The proposal for the Bilingual Basic Skills Program under Title VII, as well as proposals for Title I and Chapter 720, were prepared as a joint effort involving school, parents, and other members of the local community with full cooperation from the Superintendent's Office of High Schools for the Bronx. The proposals, all of which were funded, were designed to help develop a solid supportive base for the regular school program.

The Title VII project was specifically designed with an academic orientation. It proposed to provide supportive services to teachers of targeted students, to develop the basic curriculum for Spanish-language classes, and to develop an English-language program for LEP students. Specifically, the project proposed the following three-year objectives:

1. A program for bilingual students offering information and instruction in post graduation alternatives in institutions of higher education will be established and functioning at South Bronx High School.

2. From the student population at South Bronx High School, as great a percentage of Hispanic students as that of students from English dominant background will pursue some form of post-high school education.

3. A Bilingual Health Academy will be organized and functioning, offering students interested in Health Professions instruction and training in fields of their choice.

4. An ongoing program of intervisitation involving agencies in the community who represent the four magnet areas of South Bronx High School will be implemented for its bilingual students. The four magnet areas are: Urban Planning and Development; Business; Government and Law; Health Professions.

5. Students participating in the program will develop and maintain reading and writing skills in English which will exceed by at least six months the minimum reading standards required for graduation.

6. Students in the program will demonstrate a significant increase in reading skills in Spanish.

7. Students in the program will pass City-wide examinations in social studies, science, and mathematics at a rate comparable to their English dominant peers.

8. Bilingual curriculum will have been developed in the following areas: American History; World History; mathematics 9th and 10th grade; physical science; biology; health professions; law and government; Urban Planning and Development; Hispanic culture (through reading skills); Spanish in New York; Our Many Heritages; Pluralism in America.

9. Students as part of the program will be more involved in inter-cultural and inter-racial school and community activities as a result of their increased understanding of our ethnically varied society.

10. Students participating in the program will show an increased pride in their heritage as evidenced by school and community presentations and contributions.

11. A knowledgeable bilingual staff with an enhanced awareness of the philosophy and practices of bilingual education will be hired and trained to assure maintenance of an effective program.

Operating with department status, the program serves more than half the Hispanic students in the school each year. Figure 1 shows the placement of the program within the school organization as a whole, as well as the relationship of project administrators, staff, and teachers to each other.

Despite changes in personnel, the program met its objectives. Several factors are reponsible for this success. Although some administrative personnel left the program, they had performed competently in the program and moved to other positions. Since new personnel were recruited from the same source (Brandeis High School) and were neither personally nor professionally unknown, their orientation and adjustment period was minimal. Since all personnel shared a similar philosophy and approach to bilingual education, each change in personnel was not accompanied by a change in program direction. Since new personnel came into a positive, supportive environment,

their energies could be spent on the program itself. Despite changes, some key personnel remained stable: the assistant principal who supervised the teaching staff, the grade advisor, the educational assistant, and, for the most part, the teaching staff.

The current project director stated that she did not feel especially hampered by having to take over a program after two previous directors had run it for the first three years. According to the grade advisor, the permanent program personnel did not feel that interruptions occurred every time a new staff member began to work; if anything, he felt, the inconvenience seemed to have been greater for newcomers who had to accommodate to different co-workers and styles.

Although staff changes did not prevent the classroom program from running smoothly, the time taken to "learn the ropes" increased the amount of time directors spent on administrative detail and limited their opportunities to exert educational leadership both in the program and in the rest of the school. Past directors regretted not having had more time to interact with program students. The current director commented on the lack of time for her to develop a strong emotional attachment to a program that was coming to an end. Her greater emotional investment was to the new program proposed for the 1982-1983 year that she helped develop.

FUNDING

Table 4 indicates funding sources for the non-instructional component. Table 5 indicates funding sources for the instructional component.

Figure 1

School and Project Organization

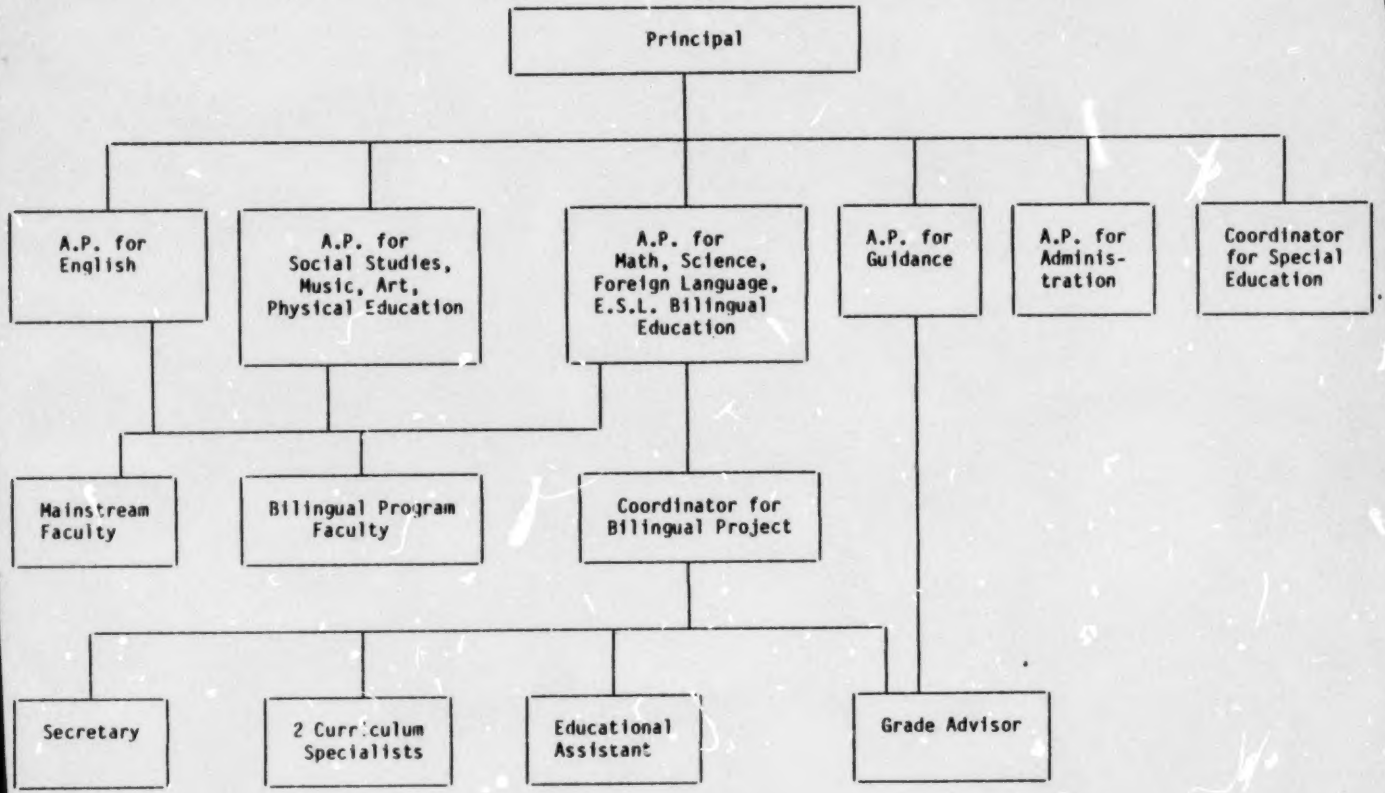

TABLE 4

Funding of Non-Instructional Positions

Function	Funding Sources	Position
Administration and Supervision	Tax levy	Assistant Principal for Bilingual Ed.
Curriculum Development	Title VII	Curriculum Specialist (E.S.L.)
	Title VII	Curriculum Specialist (Content-Area)
Supportive Services	Title VII	Bilingual Grade Advisor
Staff Development	Title VII	Project Director
Parental Involvement	Title VII	Bilingual Grade Advisor
Other	Title VII	Bilingual Secretary Educational Assistant

TABLE 5

Funding of Instructional Positions

Subject	Funding Sources	Number of Positions	
		Teachers	Paraprofessionals
E.S.L.	Tax Levy, P.S.E.N., & Title I	3	1
Reading (English)	Tax Levy	1	
Spanish Language Arts	Tax Levy	2	
Math	Module 5 & Tax Levy	1	
Social Studies	Module 5 & Tax Levy	1	1
Science	Tax Levy	1	
Other	Tax Levy	5	

STAFF CHARACTERISTICS

The professional teaching staff serving the bilingual project students has average teaching experience of over ten years. More than half of the staff has a master's degree; others are working towards it. The entire staff is bilingual and all are certified in the subject they are teaching. Table 6 outlines staff characteristics.

The project director coordinates the work of the staff. However, the responsibility for staff supervision falls to the assistant principals of the various content areas. The program director does, however, directly supervise the educational assistant, a former teacher in El Salvador, who works with three bilingual teachers for two periods each per day in small group and individualized instruction.

TABLE 6

Staff Characteristics

Position	Degree	Certification
Project Director	MA	Spanish/E.S.L.
Grade Advisor	MS	Spanish
Curriculum Specialist E.S.L.	MA	Spanish/E.S.L./French
Curriculum Specialist (Content)	MS	Biology/General Science
E.S.L. teacher	BA	English
E.S.L. teacher	BA	E.S.L.
Science teacher	BS	Bilingual General Science/Biology
Math teacher	MS	Bilingual Math
Social Studies teacher	BA	Bilingual Social Studies
Spanish teacher	MA	Spanish
Spanish teacher	BA	Spanish
Spanish teacher	MA	Spanish

V. INSTRUCTIONAL COMPONENT

STUDENT PLACEMENT AND PROGRAMMING

Students who score below the twenty-first percentile on the LAB test are placed in the bilingual program. The grade advisor then interviews them and reviews their previous school records in order to place them properly within the program. Consultation with the assistant principal and the program's E.S.L. curriculum specialist and, where necessary, the administration of additional tests help the grade advisor assemble an appropriate program for each student.

Each student takes a program of seven daily class periods (plus lunch). Each program includes content-area instruction, English- and Spanish-language instruction, and classes that are offered only in the mainstream (physical education, art, music, industrial arts). Placement in the E.S.L. sequence is determined by scores on the LAB and Criterion Referenced English Syntax Tests (CREST). Scores on the Interamerican Series Prueba de Lectura help determine placement in the Spanish language arts sequence, while teacher-made diagnostic tests help determine mathematics placement. The total program is designed to fulfill city and state requirements for graduation.

On the basis of interviews and testing, some students are classified as English dominant, although they fall below the twenty-first percentile on the LAB test. These students are placed in the appropriate E.S.L. class, while they take all content-area instruction in English.

ENGLISH-LANGUAGE INSTRUCTION

The E.S.L. curriculum is designed to meet all Regents Competency Test (R.C.T.) requirements. The instructional objectives at each level are correlated and coded to the syntactical objectives of the Title I program and of the specific CREST objectives at that level. The initial focus of instruction is oral. As the sequence progresses, emphasis shifts to reading and writing. In order to proceed to the next level of E.S.L., the student must pass a minimum of 80 percent of the course objectives. When this criterion is met in the upper intermediate level, a student is considered ready for partial mainstreaming.

E.S.L. classes use the classical approach: oral practice, repetition, reading aloud, role playing, and dialogue exercises. Teachers are well trained in the E.S.L. techniques that create a dynamic setting in which students participate enthusiastically.

Each student's progress is recorded in an individual folder. Each folder contains departmental exercises that test the student's performance on the objectives for each level, as well as teacher-selected exercises that show student progress in reading and writing skills. The school had a considerable supply of materials for use at all E.S.L. levels.

Table 7 outlines the E.S.L. courses offered during the 1981-1982 year.

SPANISH-LANGUAGE INSTRUCTION

The native language arts sequence is designed to accommodate three types of students: Spanish-dominant students who need to continue to develop their Spanish-language skills: English-dominant students who are mastering Spanish as a second language; and students dominant in either language who have the

TABLE 7

Instruction in English as a Second Language

(Year 4)

Course	Number of Classes		Average Register		Classes Per Week	Description	Curriculum Materials
	Fall	Spring	Fall	Spring			
E.S.L. 1	1	-	36	-	10	Newly-arrived students	English Step by Step
E.S.L. 2	2	2	16	19	10	Developmental sequence for oral English skills	English for a Changing World, Learning English as a Second Language, Skits in English, Study Skills for Students of E.S.L.
E.S.L. 3	2	2	17	12	10		
E.S.L. 4	1	1	27	29	5		
E.S.L. 5	1	1	20	20	5		
L.E.D.	1	1	33	24	5	English-dominant students with limited English-language skills	Journey to Fame, Little Stones for Big People, Multiple Skills Series
E.S.L. Reading 2	1	1	32	34	5	Developmental sequence for English-reading skills	30 Passages, Growing in English-Language Skills, International Folktales
E.S.L. Reading 3	2	1	16	22	5		
E.S.L. Reading 4	1	1	26	23	5		

degree of competence in Spanish to handle literature courses in Spanish. The N.L.A. program is also the main vehicle for teaching native culture.

Table 8 lists N.L.A. courses offered in the 1981-1982 year.

The evaluator observed a Spanish 4x class, one for English-dominant students of Hispanic background. Although the students usually use Aventuras en la Ciudad as a text, in this class session the teacher drew on the students' own experiences in order to teach comparative forms. The teacher led the discussion of new vocabulary entirely in Spanish, although some students gave the meanings in English. While students showed varying degrees of proficiency in comprehension and pronunciation, they were extremely involved in the class discussion.

CONTENT-AREA INSTRUCTION

Classes using Spanish as the language of instruction are offered in the math, science, and social studies departments. The offerings in these required basic courses parallel those taught in English in the mainstream. Both mainstream and bilingual students take uniform examinations at the end of the school year. Table 9 lists bilingual courses given during the 1981-1982 year.

TABLE 8

Instruction in Native Language Arts

(Year 4)

Course	Level		No. Of Classes		Average Register		Curriculum Materials In Use
	Fall	Spring	Fall	Spring	Fall	Spring	
Spanish	1	2	3	2	37	34	Various in accordance with Borough Superintendent's Guidelines
Spanish	3	3	2	3	37	30	
Spanish	3X	4X	2	1	28	28	
Spanish	5	6	1	1	25	28	
Spanish	5X	6X	1	1	37	28	
Spanish	7	8	2	1	25	19	
Spanish	-	8X	-	1	-	20	

. "X" classes are for Spanish-dominant students who have reading and writing skills in the language.

. Regular classes are for English-dominant students of Hispanic background.

. All classes meet five periods a week.

TABLE 9

Bilingual Instruction in Content Areas

Course	Level		No. of Classes		Average Register	
	Fall	Spring	Fall	Spring	Fall	Spring
World Culture	1	-	1	-	26	-
Economics	-	N/A	-	1	-	11
General History	1	2	2	2	31	25
World History	1	2	2	1	24	37
Math	1	2	3	2	23	25
Math	3	1	2	1	15	34
General Science	1	2	3	2	22	25
Biology	1	2	2	1	28	32

. All classes meet five times a week.

. All classes are taught in Spanish except for Biology (70 percent Spanish/ 30 percent English) and Economics (60 percent Spanish/40 percent English).

. Materials correspond to mainstream courses. Most are in Spanish, except for biology and economics classes which use some English-language material.

Course offerings are dictated by the needs of the students in a given year. In the past, Regents biology, general math, and algebra were offered. Until last year, the science department also offered bilingual chemistry, the only school in the Bronx able to do so. However, they can no longer offer this course and students have to wait to take chemistry until they know enough

English to function in a mainstream class.

The social studies program is an important vehicle through which to teach native culture. Presentations on various Latin American cultural patterns and history are incorporated into the curricula.

LIBRARY AND LABORATORIES

The school library has a section devoted to books in Spanish. Most of these are fiction and poetry. It also contains several social studies books, including some volumes on Puerto Rico. The project resource center houses reference books and content-area textbooks in Spanish.

In addition to using the biology lab at least once a week as part of their science program, program students make considerable use of the computer lab that opened in September 1981. When it opened, a math resource specialist gave orientation classes for school faculty on the use of the Commodore business computers in the lab. There are two computer labs: one for math skills; the other for the elements of computer programming.

The math skills lab functions in conjunction with the program's math classes. Mostly from the ninth and tenth grades, students are assigned by their math teachers on an individual basis to use the computers to do specific math drills. The bilingual lab attendants are able to handle students from both the mainstream and the bilingual programs. The computer drill programs use a minimum of language for their simple commands.

At any given time, students from different classes work in the lab. On the day the evaluator visited the lab, two of the dozen students working in it were from the bilingual program. They were doing an arithmetic drill exercise in the form of a tic-tac-toe game. In order to earn a turn at the game,

the student had to supply the correct answer to a math problem.

Students can learn BASIC in the second computer lab, which is open to seniors and taught in English. On the day the evaluator observed this lab, there were two students in the class who had been mainstreamed from the bilingual program.

TRANSITION INTO THE MAINSTREAM

Officially, students are ready to leave the bilingual program when they score above the twenty-first percentile on the LAB test. In practice, the decision to mainstream is based not only on the test score but on consultation with E.S.L. teachers, content-area teachers, and the grade advisor. In addition to language and academic readiness, students must be emotionally prepared to continue their academic progress with less continual access to the program's supportive mechanisms. The decision to mainstream is done finally on the authorization of the assistant principal in charge of the program.

Preparation for mainstreaming begins within the program in two classes, biology and economics, where instruction in English is partially introduced. Other instruction in English in content areas is done at the teacher's discretion and depends of the language ability of each class. English-language textbooks are introduced in bilingual classes during the tenth and eleventh grades. Some tests in content-area classes are offered in both languages, and each student can select which version to take.

Mainstreaming begins gradually with classes like typing and math which carry a light reading load. While taking these courses, students continue to take the bulk of their classes in the program. Table 10 indicates mainstream classes attended by project students.

Once fully mainstreamed, students have their progress followed by the program grade advisor, who encourages them to discuss any problems with the bilingual staff. Students also maintain program contact through participation in ongoing program activities and special events. Flexible, individual programming allows mainstreamed students to return to the program if they prove unprepared to keep up with the work in the mainstream classes.

Table 10

Mainstream Classes in Which Program Students Were Enrolled

(Year 4)[a]

Subject	No. Of Students	Criteria For Selection
English	8	Students have completed E.S.L./L.E.D. sequence
Reading Lab	32	Students are English-dominant, are in mainstream English classes, or have reached E.S.L. 5
Computer Lab	-	As assigned by math teachers
Physical Education	371	Required for graduation
Art	6	These are courses not offered in the bilingual department. Students elect to take these once they have attained a level of English proficiency which enables them to function in the mainstream.
Music	5	
Typing	9	
Industrial Arts	11	
Chemistry	3	
Algebra	10	
American Studies	8	
Project Discovery	2	

[a]All classes meet five periods a week.

VI. NON-INSTRUCTIONAL COMPONENT

CURRICULUM DEVELOPMENT

During the 1981-1982 year, the emphasis of the Basic Skills Program in terms of curriculum development was on the assembling of already existing materials that would be of use to program students, rather than on the creation of new materials. The materials gathered included:

--commercial textbooks and reference material for the over 30 courses offered in the bilingual program, which were purchased through a number of funding sources;

--materials developed in bilingual centers like the Northeast Center for Curriculum Development in the Bronx and the Bilingual Resource Center at the Board of Education in Brooklyn;

--materials developed by older, more established programs like those at Brandeis and Eastern District High Schools.

In addition, the program created new materials that included:

--resource units for world history;

--resource unit for health science;

--a resource unit on consumer mathematics for ninth-grade math;

--a resource unit in journalism for Spanish language arts;

--a unit of regional studies on Southwest Asia for world culture;

--a booklet, The Age of Bronze in China, for world culture;

--a questionnaire on health practices and services in the New York Hispanic community for health science.

Program staff also translated existing materials, such as New York City curriculum for biology and general science, the city-wide social studies test, and school tests given in mainstream classes such as art in which program students must enroll. In order to meet New York City curriculum standards, they adapted a Spanish-language test in economics for student use.

SUPPORTIVE SERVICES

While the curriculum specialists and educational assistant are available to provide some support services, the grade advisor is primarily responsible for dealing with individual and group guidance, career and vocational counseling, home contact, and service agency contacts. Individual guidance sessions cover such problems as language difficulties, cultural and social adjustment, discipline, family situations, health, and peer pressure and relationships. Informal group guidance sessions are based on topics suggested by the school, including requirements, standards, and academic and social expectations. This has been helpful to students, especially in giving them a place to discuss their reactions to their new environment and the ways in which both it and school regulations might clash with their cultural traditions. The grade advisor has access to the rest of the guidance staff in the school and to the supervisor for consultation in relation to these individual and group sessions.

Where necessary, the grade advisor makes referrals to community agencies. Students' families have needed help in resolving legal problems such as immigration status, eligibility problems with food stamps, welfare, or medicaid, and health problems such as immunization and teenage pregnancy. Local agencies used include the clinics at Lincoln, Prospect, and Lebanon Hospitals, the Hunts Point Multiservice Center, and the Puerto Rican Family Institute.

Since the program has no family assistant, the grade advisor makes occasional home visits. Most home contact, however, is done by phone or letter. When problems arise, parents are usually asked to come to school for a conference. The grade advisor reports that parents had been very cooperative when called. Since the grade advisor teaches at night at the local bilingual college, he sees parents there who cannot come in during the day.

The grade advisor also meets individually with students to discuss vocational plans. In addition, program students participate in school-wide activities like Career Day, at which representatives from industry, business, the armed forces, and colleges visit the school. To help determine which representatives are invited to the school, staff helps program students fill out questionnaires about their interests and vocational goals.

The curriculum specialist is available to assist students with problems they are having in the academic program. The director is able to organize additional academic support. She obtained approval from a special city-wide summer program to offer a program in E.S.L. and a math lab during July.

STAFF DEVELOPMENT

During the school year, some staff members took courses that were partly paid for by funds from the Basic Skills program. Three teachers who are completing work toward a master's degree took courses in western civilization, American history and civilization, theories and practices of bilingual education, linguistics, teaching E.S.L., bilingual-bicultural education, and special education.

At monthly departmental meetings held by the assistant principal in charge of the program, teachers and staff discuss administrative and pedagogical issues. Since all departments, except social studies, that offer courses in the bilingual program fall under the supervision of this assistant principal, it is possible for a wide range of matters pertaining to the bilingual program to be discussed at this meeting.

E.S.L. training for staff has been done both at the school and at the State Education Department. The school has an ongoing in-service program to improve

instruction. As a result, a specialist in E.S.L. education visited the school for individual sessions with E.S.L. teachers in the program. The program staff gained further training through the participation of the director, the E.S.L. resource teacher, two E.S.L. teachers, and the E.S.L. educational assistant in sessions sponsored by the Board of Education at the State Education Department. The project director also attended the New York State ESOL/BE Association conference in Rochester in October, as well as the New York City and State Education Department workshops on the writing of Title VII proposals.

PARENTAL AND COMMUNITY INVOLVEMENT

Although the parents of program students are actively concerned about their children's progress, it is difficult to get them together for a meeting and they are, for the most part, not willing to become active in the school's P.T.A. Since the school's attendance area is large, parents do not relate to each other as members of the same neighborhood with common concerns. Traveling at night for meetings to the desolated area where the school is located is a further deterrent, especially since the nearest subway station is seven blocks from the school. The general attitude of these parents is that, as long as the school is doing its job and their children are not having difficulty, there is no reason for the parents to be there.

Nonetheless, staff reports considerable parent contact. The grade advisor maintains an open door policy that encourages parents to come in or call the office when there is any problem. A letter is sent to parents as soon as their child is admitted to the program. Vocero Bilingüe, a biannual bilingual newsletter, is sent to the students' homes; it contains information on the school and program.

A core group of parents is active. The eight parent members of the Parent-Community Advisory Committee help organize school events and attend the E.S.L. classes offered by the program, which have a total enrollment of 13. Parents came to the Orientation Coffee Hour in September and attended the December meeting at which the new Title VII proposal (1982-83) was discussed. Fifteen project parents were at the April workshop at Hostos College on community resources.

The program maintains contacts with several local agencies, particularly those to which parents can be referred for help. Some of these agencies participate in the advisory committee.

AFFECTIVE DOMAIN

The Bilingual Basic Skills program is proud of the attendance record of its students, who were consistently cited on this score. Student mainstreaming has been smooth. The president of the student body for the 1980-81 year was a program student. A high number of awards at graduation went to program students. They participated eagerly in extracurricular activities, including writing for Vocero Bilingüe. Students observed in classes participated enthusiastically.

The assistant principal points with particular pride to the achievement of program students. He says that the percentage of students who are two years below level in math has been decreasing in the school as a whole and that students in the school are passing the R.C.T. with scores above the borough-wide norm. Project students are included in this trend.

A small number of students requested transfer to the mainstream because their parents were under the misconception that they would not learn English

in the program, because of pressure from a peer group that viewed the program negatively, or because of identity problems which fostered a desire not to be identified with Hispanic students.

A larger problem involves student resistance to leaving the program. They are aware that they will receive less personal attention once they are mainstreamed. The program is very conscious of this fact and attempts to mainstream students carefully and gradually.

Some program students participated in two projects designed to develop initiative and self-confidence. Funded by the Edwin Gould Foundation and with an out-of-school coordinator, the Discovery-Environmental Studies project provides physical education, outdoor survival skills, wilderness training, canoeing, skiing, and rock climbing. Students also learn gardening skills by maintaining a garden in front of the school. The National Leadership Conference sponsored a 20-day camping trip during the summer of 1981 in which two program students participated along with eight others from the school. After helping raise funds for the trip, the students left for Camp Minivanca in Shelby, Michigan; they spent half their time traveling through the wilderness to get to the conference grounds and the other half participating in leadership training.

The drop-out rate in the bilingual program has been insignificant. Five students were reported to have left the program during the 1981-1982 school year. Their reasons for leaving were not known. This number is relatively small in comparison to other high school programs in New York City.

VII. FINDINGS

ASSESSMENT PROCEDURES, INSTRUMENTS, AND FINDINGS

The following section presents the assessment instruments and procedures, and the results of the testing to evaluate student achievement in 1981-1982.

Students were assessed in English-language development, growth in their mastery of their native language, mathematics, social studies, and science. The following are the areas assessed and the instruments used:

English as a second language -- CREST (Criterion Referenced English Syntax Test), Levels I, II, III)

English performance -- New York City Reading Test

Mathematics performance -- New York City Mathematics Test and Teacher-made tests

Science performance -- Teacher-made tests

Social studies performance -- Teacher-made tests

Native language arts performance -- Teacher-made tests

Attendance -- School and program records

The project originally proposed to assess student outcomes in Spanish by using the Interamerican Series, Prueba de Lectura. However, the data was sufficiently problematic that the results could not be interpreted meaningfully. As a result, they are not reported.

On pre/post standardized tests English reading achievement and mathematics performance, statistical and educational significance are reported.

Statistical significance was determined through the application of the correlated t-test model. This statistical analysis demonstrates whether the difference between pre-test and post-test mean scores is larger than would be

expected by chance variation alone; i.e. is statistically significant.

This analysis does not represent an estimate of how students would have performed in the absence of the program. No such estimate could be made because of the inapplicability of test norms for this population, and the unavailability of an appropriate comparison group.

Educational significance was determined for each grade level by calculating an "effect size" based on observed summary statistics using the procedure recommended by Cohen.* An effect size for the correlated t-test model is an estimate of the difference between pre-test and post-test means expressed in standard deviation units freed of the influence of sample size. It became desirable to establish such an estimate because substantial differences that do exist frequently fail to reach statistical significance if the number of observations for each unit of statistical analysis is small. Similarly, statistically significant differences often are not educationally meaningful.

Thus, statistical and educational significance permit a more meaningful appraisal of project outcomes. As a rule of thumb, the following effect size indices are recommended by Cohen as guides to interpreting educational significance (ES):

a difference of 1/5 = .20 = low ES

a difference of 1/2 = .50 = moderate ES

a difference of 4/5 = .80 = high ES

The instrument used to measure growth in English language was the Criterion Referenced English Syntax Test (CREST), which tests mastery of specific syntactic skills at three levels. Material at the beginning and intermediate

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*Jacob Cohen. Statistical Power Analysis for the Behavioral Sciences (Revised Edition). New York: Academic Press, 1977 Chapter 2.

levels of the CREST is broken down into 25 objectives per level, such as present-tense forms of the verb "to be" (Level I), or possessive adjectives and pronouns (Level II). Material at the advanced level (Level III) is organized into 15 objectives, such as reflexive pronouns. At each level, students are asked to complete four items for each objective. An item consists of a sentence frame for which the students must supply a word or phrase chosen from four possibilities. Mastery of a skill objective is determined by a student's ability to answer at least three out of four items correctly.

This report provides information on the average number of objectives mastered and the average number of objectives mastered per month of treatment at the various test levels for students who were pre- and post-tested with the same test level.

Rates of success of students in mathematics, science, social studies, and native language arts courses taught in the bilingual program are reported by subject area and by grade. These tables contain the numbers of students reported as taking the relevant courses and the percent passing, for fall and for spring courses separately. Data are also reported for program students who were taking mainstream courses in the same content areas.

Comparisons of the attendance rates of program participants with that of the school as a whole are presented by grade. This table contains the average rate for the school and for the various participant groups, the percent difference between the school and the program, values of the z statistic for the significance of the differences between proportions, and the level of significance.*

*James L. Braining, B.L. Kintz. Computational Handbook Statistics Glenvican, Illions Scott, Forsman and Company, 1968, p197.

TABLE 11

Results of the Criterion Referenced English Syntax Test (CREST): Number of Objectives Mastered, and Objectives Mastered Per Month

(E.S.L. Title I Spanish-Speaking Students, Fall)

Grade	Number Of Students	Average Number Of Objectives Mastered Pre	Post	Objectives Mastered[a]	Average Months Of Treatment	Objectives Mastered Per Month
9	56	10.9	15.6	4.6	3.1	1.5
10	34	11.5	17.4	5.8	3.1	1.9
11	17	11.8	17.1	5.2	3.0	1.8
12	9	9.8	13.7	3.8	3.2	1.2
Total	116	11.1	16.2	5.0	3.1	1.6

[a]Post-test minus pre-test.

- Students mastered 5 objectives, or 1.6 objectives per month of instruction in the fall.
- The results exceed the criterion determined by the E.S.L. office of the Division of High Schools (New York City Public Schools) for students in Title I programs (an average of one objective mastered per month of instruction).

TABLE 12

Performance of Students Tested on the Criterion Referenced English Syntax Test (CREST): Average Number of Objectives Mastered by Grade and Test Level

(E.S.L. Title I Spanish-Speaking Students, Fall)

	LEVEL I					LEVEL II					LEVEL III				
		Average Number of Objectives Mastered					Average Number of Objectives Mastered					Average Number of Objectives Mastered			
Grade	N	Pre	Post	Gains[a]	Gains Month	N	Pre	Post	Gains[a]	Gains Month	N	Pre	Post	Gains[a]	Gains Month
9	24	8.2	13.1	4.9	1.6	29	13.4	18.2	4.7	1.5	3	8.0	9.7	1.7	0.5
10	13	11.4	17.1	5.7	1.7	20	11.8	17.9	6.1	2.0	1	7.0	10.0	3.0	1.4
11	3	17.0	20.0	3.0	1.0	9	13.9	19.7	5.8	1.8	5	5.0	10.8	5.8	2.4
12	-	-	-	-	-	3	15.0	20.7	5.7	1.8	6	7.2	10.2	3.0	0.9
Total	40	9.9	14.9	5.0	1.6	61	13.0	18.4	5.4	1.7	15	6.6	10.3	3.7	1.4

Note. Number of objectives for each level: Level I (25), Level II (25), Level III (15).

[a]Post-test minus pre-test.

- In general, students at all levels mastered at least one objective per month of treatment.
- All groups mastered at least one objective per month of instruction, except grade 11, Level I; grade 9, Level III; and grade 12, Level III.
- Results of students showing low gains must be interpreted cautiously because the number included in the analysis is very low.
- The highest gains occur mostly among students tested at Level II.
- The high gains per month for Level III students are well above the achievement level generally reported for students in Title I programs.

TABLE 13

Results of the Criterion Referenced English Syntax Test (CREST): Number of Objectives Mastered, and Objectives Mastered Per Month

(E.S.L. Title I Spanish-Speaking Students, Spring)

Grade	Number Of Students	Average Number Of Objectives Mastered Pre	Post	Objectives Mastered[a]	Average Months Of Treatment	Objectives Mastered Per Month
9	56	10.7	15.0	4.3	3.4	1.4
10	38	12.8	17.0	4.2	3.2	1.3
11	15	13.8	18.1	4.3	3.1	1.4
12	3	12.3	16.7	4.3	3.1	1.4
Total	112	11.9	16.2	4.3	3.2	1.4

[a]Post-test minus pre-test.

- The gains made are the same across the four grades reported.
- On the average, students mastered 4.3 objectives, or 1.4 objectives per month of spring instruction.
- The results exceed the criterion set for achievement by students in Title I programs throughout New York City high schools (an average of one objective per month of treatment).

TABLE 14

Performance of Students Tested on the Criterion Referenced English Syntax Test (CREST): Average Number of Objectives Mastered by Grade and Test Level

(E.S.L. Title I Spanish-Speaking Students, Spring)

	LEVEL I					LEVEL II					LEVEL III				
		Average Number of Objectives Mastered					Average Number of Objectives Mastered					Average Number of Objectives Mastered			
Grade	N	Pre	Post	Gains[a]	Gains Month	N	Pre	Post	Gains[a]	Gains Month	N	Pre	Post	Gains[a]	Gains Month
9	16	10.1	15.4	5.2	1.7	20	12.2	17.9	5.7	1.8	20	9.8	12.0	2.2	0.6
10	9	17.1	21.1	4.0	1.3	17	0.9	17.1	5.2	1.7	12	10.9	13.8	2.9	0.9
11	3	13.3	16.7	3.3	1.1	8	16.2	21.2	5.0	1.5	4	9.2	12.7	3.5	1.2
12	-	-	-	-	-	1	18.0	22.0	4.0	1.2	2	9.5	14.0	4.5	1.4
Total	28	12.7	17.4	4.6	1.5	46	12.9	18.3	5.3	1.7	38	10.0	12.7	2.7	0.8

Note. Number of objectives for each level: Level I (25), Level II (25), Level III (15).

[a]Post-test minus pre-test.

. Students at Levels I and II had a similar rate of mastery of over one objective per month of treatment. Students at Level III, on the average, made more modest gains.

. Gains are relatively similar across grades and levels, except grades 9 and 10 at Level III.

. The low rate of mastery at Level III (0.8) is similar to the mastery rates recorded for Level III students in other E.S.L. Title I programs in New York City high schools.

TABLE 15

English Reading Achievement

Significance of Mean Total Raw Score Differences Between Initial and Final Test Scores in English Reading Achievement of Students with Full Instructional Treatment on the New York City Reading Test, by Grade

		Pre-Test		Post-Test						
Grade	N	Mean	Standard Deviation	Mean	Standard Deviation	Mean Difference	Corr. Pre/post	T-test	p	E.S.
9	47	43.5	14.0	47.1	14.7	3.6	.83	2.90	.006	.56
10	54	35.4	12.0	38.7	13.4	3.3	.85	3.40	.001	.60
11	29	37.1	11.7	39.9	14.5	2.8	.78	1.65	NS	.42
12	22	33.5	12.1	35.9	10.3	2.4	.63	1.15	NS	.34

- At least 44 percent of program students took the New York City Reading Test.
- The gains for grades 9 and 10 were statistically significant and of moderate educational significance.
- The gains for eleventh and twelfth grade were not statistically significant but were of low to moderate educational significance.

TABLE 16

Mathematics Achievement

Significance of Mean Total Raw Score Differences Between Initial and Final Test Scores in Mathematics Achievement of Students with Full Instructional Treatment on the New York City Mathematics Test, by Grade

		Pre-Test		Post-Test						
Grade	N	Mean	Standard Deviation	Mean	Standard Deviation	Mean Difference	Corr. Pre/post	T-test	p	E.S.
9	48	23.3	6.9	26.0	8.4	2.7	.68	3.01	.004	.56
10	55	26.5	8.3	28.7	8.3	2.2	.79	3.07	.003	.53
11	29	20.7	7.9	23.0	8.1	2.4	.74	2.17	.039	.55
12	22	18.5	8.3	19.0	8.1	0.5	.92	0.71	NS	.22

- At least 44 percent of program students took the New York City Mathematics Test.
- The gains for grades 9, 10, and 11 were statistically significant and of moderate educational significance.
- The twelfth graders did not make significant gains.

TABLE 17

Number of Spanish-Speaking Students Attending Courses and Percent Passing Teacher-Made Examinations in Content-Area Courses by Grade

Fall Subjects	Grade 9 N	Grade 9 % Passing	Grade 10 N	Grade 10 % Passing	Grade 11 N	Grade 11 % Passing	Grade 12 N	Grade 12 % Passing	Total N	Total % Passing
Mathematics	126	46.0	102	56.9	57	57.9	24	66.7	309	53.0
Science	116	55.2	86	64.0	50	66.0	10	70.0	262	60.7
Social Studies	125	60.8	107	72.0	59	69.5	27	70.4	318	67.0
Native Language	85	95.3	68	94.1	40	92.5	13	92.3	206	94.2

Spring Subjects	Grade 9 N	Grade 9 % Passing	Grade 10 N	Grade 10 % Passing	Grade 11 N	Grade 11 % Passing	Grade 12 N	Grade 12 % Passing	Total N	Total % Passing
Mathematics	128	52.3	106	60.4	55	69.1	16	81.3	305	59.7
Science	110	49.1	70	68.6	30	70.0	12	58.3	222	58.6
Social Studies	120	51.7	103	64.1	54	63.0	19	63.2	296	58.8
Native Language	103	61.2	79	74.7	53	50.9	23	69.6	258	64.0

- More than 70 percent of the students reported were ninth and tenth graders.
- Passing percentages in the fall varied more than in the spring. The range for the fall was from 53.0 for mathematics to 94.2 for native language. The range for the spring was from 58.6 to 64.0.
- Mathematics performance improved with each successive grade in both semesters since two thirds of the students taking mathematics were in ninth and tenth grades, the poor performance may be due to difficulty in lower level courses.

TABLE 17 (continued)

- Native language performance for the fall decreased slightly with each successive grade but remained within a range of 3 percentage points (92.3 to 95.3 percent). However, the results for the spring ranged from 50.9 for grade 11 to 74.7 for grade 10. There was a large drop in passing percentages and more variation in the spring.

TABLE 18

Number and Percent of Students Passing Teacher-Made Examinations in Content-Area Courses by Language of Instruction

		NATIVE LANGUAGE		ENGLISH	
Semester	Subject	N	Percent Passing	N	Percent Passing
Fall	Mathematics	223	54.3	86	51.2
	Science	167	62.9	95	56.8
	Social Studies	201	65.7	117	69.2

- Performance in fall mathematics and science courses was better in classes conducted in the native language while performance in social studies was better in classes conducted in English.
- In the fall, the number of students reported as taking content-area classes in the mainstream was substantially smaller than those enrolled in content-area classes taught in Spanish.

Spring	Mathematics	230	57.8	75	65.3
	Science	145	58.6	77	58.4
	Social Studies	207	58.5	88	59.1

- Performance in spring mathematics courses was better in classes conducted in English: performance in science and social studies was about the same regardless of the language of instruction.
- Overall performance in mathematics was better in the spring regardless of the language of instruction.
- Performance in science was better in the fall than in the spring in classes taught in Spanish and better in the spring than the fall when taught in English.
- Overall, performance in social studies was better in the fall regardless of the language of instruction.

TABLE 19

Significance of the Difference Between Attendance Percentage of Program Students and the Attendance Percentage of the School

Grade	N	Mean Percentage	Standard Deviation
9	138	86.16	14.62
10	113	86.78	11.10
11	62	86.35	12.23
12	27	90.76	6.91
TOTAL	340	86.77	12.62

Average School-Wide Attendance Percentage: 71.75

Percentage Difference = 15.02 $z = 6.15$ $p<.001$

- Program attendance was 15 percentage points higher than the school-wide attendance.
- The difference in attendance was of high statistical significance.

SUMMARY OF FINDINGS

English Achievement

Forty-four percent of program students took the New York City Reading Test. The gains on this test were statistically significant and of moderate educational significance.

The program students gained more than one objective per month on the Criterion Referenced English Syntax Test (CREST) each semester.

Native Language Achievement

In native language arts (Spanish) courses, 94.2 percent of the program students passed teacher-made examinations in the fall with the passing rate ranging from a low of 92.3 percent (grade 12) to a high of 95.3 percent passing (grade 9).

In the spring, 64 percent of the program students passed teacher-made tests in native language arts (Spanish), with the passing rate ranging from a low of 50.9 percent (grade 11) to a high of 74.7 percent (grade 10).

It should be noted that the program proposed to evaluate student achievement in Spanish by using the Interamerican Series, Prueba de Lectura. However, the data reported were sufficiently problematic that the results could not be interpreted with confidence and therefore were not reported.

Content-Area Achievement

Mathematics achievement was relatively low for the more 300 students for whom information was provided. The fall passing rate was 53 percent and the spring passing rate was 59.7 percent. However, the 154 students who took the New York City Mathematics Test (given in English) showed statistically significant gains of moderate educational significance.

Science achievement was similar for both semesters. Passing rates were 60.7 percent for the fall and 58.6 percent for the spring.

Social studies achievement was higher for the fall (67 percent) than for the spring (58.8 percent passing).

Attendance

Program students' attendance (36.77) was 15 percentage points higher than the school-wide attendance, a statistically significant difference.

VIII. CONCLUSIONS AND RECOMMENDATIONS

At the fourth and final year of Title VII funding, the bilingual program at South Bronx High School has been firmly established. It will survive without the extra personnel provided by the Title VII project during its first four years. The school is now ready to move on to its next stage: the development of a bilingual component with career and vocational orientation.

Adding to the program's excellent possibilities for continued success is the enthusiastic support from the South Bronx Community and from the Borough Superintendent's office. Says the interim acting principal, who comes from that office, "This school was especially created to support this kind of program. It is valuable and firmly implanted." She remarked further that in the selection of a permanent principal for the school, commitment to the program would be an important consideration.

Although the administration is still not completely stable, the school operations and faculty functions are stable enough for the program not to be critically affected.

Had there been no Title VII, there would still be a bilingual program at South Bronx High School, but it probably would have had a patchy development. More than the visible legacy of curriculum, supplies, and equipment, the Title VII project will leave behind a sense of direction and organization for both students and staff.

Some of the contributing factors to the success of the project are:

--a climate of total acceptance where bilingualism is the main attraction, giving everyone involved an interest in the success of the program;

--a harmonious sense of purpose which focusses staff energies on relevant productive work;

--the selection of a well trained staff, experienced in the field of bilingual education; and

--the availability of a special grade advisor to create and maintain a good supportive mechanism for project students.

In spite of the stated maintenance philosophy of bilingual education in the South Bronx educational community, students in the bilingual program are still only those who are of limited-English proficiency. Philosophy and practice seem to be at odds in this instance. It will be interesting to see whether the foreign language required by the New York City Board of Education as of next year affects the way in which bilingual project participation is structured.

The following recommendations are made for possible program improvement:

1) There is often a tremendous distance between the school and the wider society. It works an especial hardship for students whose circle of family and friends do not provide a bridge to the economic mainstream. Where possible, the bridge should be created by the school. Project Discovery and the National Leadership camp program are excellent steps in the right direction. Perhaps a career guidance/survival skills program can develop a systematic way in which students can interact meaningfully with outside resources. Examples might include an economics class in which the curriculum includes researching career options in private industry; work-study programs using the bilingual market; a social studies class that analyzes how the government is dealing with Hispanic population issues. Above all, students need to deal with bilingualism as a marketable skill.

2) Student achievement findings indicate that students perform relatively well on norm-referenced tests of English reading and mathematics in English.

Further, students perform well on the CREST, a test administered to Title I E.S.L. students in New York City. However, performance on teacher-made tests in the subject areas and native language arts (spring) shows a relatively low (60 percent or below) rate of passing. It is suggested that the program review the curriculum used, the instruction provided, and the standards of performance used for grading in these areas in relation to students' linguistic and academic characteristics. Given the great diversity of student characteristics, it may be that one or a combination of the mentioned program aspects is not appropriate for particular groups of students.

3) Future program evaluation objectives should reflect the scope of program activities, and should be stated in measurable terms. Evaluation instruments should be selected based upon their relevance to the program's objectives and curricula. Efforts should be made to avoid duplicative testing, where possible.

4) Due to problematic testing conditions, Prueba de Lectura data could not be utilized. Every effort should be made to optimize the conditions of testing and to report data accurately, so that the program's achievements may be documented.